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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,595	02/27/2004	Marko Sarasmo	KOLS.096PA	6819

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Hollingsworth & Funk, LLC
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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/788,595	Applicant(s) SARASMO ET AL.	
	Examiner Abbas I. Abdulsalam	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

Objection

1. The disclosure is objected to because of the following informalities: Paragraph [0017], the first sentence reads “ In an embodiment, a user of the device may give commands to the device by moving the stylus if the stylus holder.” The sentence is incomplete. Hence, appropriate correction is required.

Drawings

Objection

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show elements, 206, and 109 and 111 as described in the specification in paragraph [0019], and paragraph [0022] respectively. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be

Art Unit: 2629

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Trademark

3. The use of the trademark Agilent ADND-2610 Optical Sensor (paragraph [0019]) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-4, 9, 11 and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitations "the rotating", "the longitudinal" and "the back". There are insufficient antecedents basis for these limitations in the claim.

Art Unit: 2629

Claim 4 recites the limitation “the basis”. There is insufficient antecedent basis for this limitation in the claim

Claim 9 recites the limitations “the rotating”, “the longitudinal” and “the back”. There are insufficient antecedents basis for these limitations in the claim.

Claim 11 recites the limitation “the pressing”. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation “the pressing”. There are insufficient antecedents basis for these limitations in the claim.

Claim 14 recites the limitations “the pressing” and “the basis”. There are insufficient antecedents basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Langstraat, (2003/0076302).

Regarding claim 1, Langstraat et al. (hereinafter = “Langstraat”) teaches a method of operating a stylus engagable electronic device comprising a screen, and a stylus holder

Art Unit: 2629

([0014], Fig. 1 (108, 112, 130), a palmtop information appliance (100) including a display (108) and a stylus (112), and [0018], a socket (130)), the method comprising: detecting movements of a stylus inside the stylus holder ([0023], Fig. 5 (136, 112), a detector 136 detects movement of the stylus (112) in a socket (130), and [0018], plurality of movements by the virtue of the socket (130) allowing 360 degree movement of the stylus (112)), executing user interface commands on the basis of the detection ([0023], the detected movement of the stylus (112) is translated into a corresponding movement of indicia such as cursor on the display (108)).

Regarding claim 2, Langstraat teaches associating different movements of the stylus with different user interface commands *([0018], the stylus (112) inside the socket (130) moves in various ways, including horizontal movement, vertical movement and circular movement resulting manipulation of an indicia such as cursor on the display (108)).*

Regarding claim 3, Langstraat teaches detecting the rotating of the stylus around the longitudinal axis of the stylus inside the stylus holder and the back and forth movement of the stylus inside the stylus holder *([0018], movements of the stylus (112) inside the socket (130) includes circular movement and up-and-down movement*

Art Unit: 2629

(130), and [0023] the detector (136) detects movement of the stylus (112)).

Regarding claim 4, Langstraat teaches activating the movement detection on the basis of a predefined command detected by user interface (*[0023], a detector (136) for detecting movement of the stylus (112), and [0014], Fig. 1 (114), control buttons (114) that may be used for entering commands, selecting menus and adjusting display qualities*).

Regarding claim 5, Langstraat teaches an electronic device (*[0014], Fig. 1(100), a palmtop information appliance (100)*), comprising a display and a stylus holder, (*[0014], Fig. 1(108, 130), a display (108), and [0018], a socket (130)*), and means to detect movements of a stylus inside the stylus holder (*[0023], Fig. 5 (136, 112), detector (136) detects movement of the stylus (112) in the socket (130)*), and means to execute user interface commands on the basis of the detection (*[0023], the detected movement by the stylus (112) is translated into a corresponding movement of indicia such as cursor on the display (108), the detected movement is translated into an image on a display by a processor which is inherent in palmtop device (100)*).

Regarding claim 6, Langstraat teaches processing means to associate different movements with different user interface commands (*[0018], the stylus (112) inside the socket (130) moves in various ways, including horizontal movement, vertical movement and circular movement resulting manipulation of an indicia such as cursor on the display (108), it is inherent that the palmtop information appliance (100) is built with a processor to perform the function.*

8. Claims 7-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denny, III (USPN 7102626) in view of Nicolas et al. (USPN 7046237).

Regarding claim 7, Denny (hereinafter = "Denny") teaches an electronic device (*col. 6, lines 45-46, Fig. 4a (10) a multifunction pointing device (10)*), comprising: a display (*col. 7, line 14, Fig. 4a(20), a display (20)*), a stylus holder (*col. 6, lines 48-51, Fig. 4a (H, 1), a holster (H) in which a pointing implement (1) is inserted and removed*), the holder comprising an inside surface (*col. 6, lines 49-51, Fig. 4a (7, H), a holster (H) includes an aperture (7) through which the pointing implement (1) is inserted and removed*), movement detection sensors to detect movements of a stylus inside the stylus holder (*col. 6, lines 46-55, Fig. 6(5p, L) the pointing implement (1) include shaft (5) a portion (5p) of which is positioned in the holster (H) and is movable rotationally and up and down along an axis, (L), and col. 8, lines 60-62, col. 8, lines 64-66, Fig. 6 (S1,*

Art Unit: 2629

S2), a first sensor S1 detects the translation up and down (U/D) of the portion 5p of the shaft 5, and a second sensor S2 detects the rotation R of the portion 5p of the shaft 5), a processor to execute user interface commands on the basis of the detection (col. 8, lines 63-67, col. 9, lines 1-2, Fig. 6 (S1, S2, deltaL, deltaR), in response to the translation U/D, the first sensor (S1) generates a first signal (deltaL) and in response to the rotation R, the second sensor (S2) generates a second signal, deltaR such that an electronic device (50) processes the first and second signals (deltaL, deltaR) to initiate an action, col. 4, lines 11-15, for example, initiating an action includes scrolling images displayed on the display).

While Denny teaches movement detection sensors (col. 8, lines 59-67, Fig. 6 (S1, S2)), Denny does not specifically teach that sensors being located “on the inside surface of the stylus holder”.

Nicolas et al. on the other hand teach as shown in Fig. 8 two different detector elements (380a, 380b) inside a slot (350) in which a stylus (80) moves in and out (col. 9, lines 36-39).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was to modify Denny's movement detection of a

Art Unit: 2629

pointing implement (stylus) with Nicolas' use of detectors inside a slot, because the use of detectors inside a slot enables a movement of stylus to automatically control the power or the on/off feature of a computer system as taught by Nicolas (col. 2, lines 61-67 and col. 3, lines 1-3).

Regarding claim 8, Denny teaches the processor is configured to scroll the display on the basis of the detection (*col. 8, lines 67, col. 9, lines 1-2, an electronic device (50) processes the first and second signals (deltaL, deltaR) to initiate an action, and col. 4, lines 11-15, initiating an action including scrolling images displayed*).

Regarding claim 9, Denny teaches the movement detection sensors are configured to detect the rotating of the stylus around the longitudinal axis of the stylus inside the stylus holder and to detect the back and forth movement of the stylus inside the stylus holder (*col.8, lines 60-62, col. 8, lines 64-66, Fig. 6 (S1, S2, L) the first sensor S1 detects the translation U/D of the portion 5p of the shaft 5 and a second sensor S2 detects the rotation R of the portion 5p of the shaft 5, and col. 8, lines 20-24, the rotation R takes place about an axis L*).

Regarding claim 10, Denny does not specifically teach means to activate the movement detection sensors.

Denny on the other hand teaches a first motion action can be any action that can be implemented in hardware, software, or a combination of hardware and software and including activating the first sensor and second sensors (S1, S2), (col. 10, lines 14-20).

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to utilize Denny's appropriate software for the purpose of implementing the desired functionalities as taught by Denny (col. 10, lines 14-29).

Regarding claim 11, while Denny teaches a housing and at least one button on the housing of the device (*col. 6, lines 45-46, col. 7, lines 23-27, Fig. 4a(50, 41), an electronic device (50) and function buttons (41)*), the device is configured to detect the pressing of a button on the housing of the device (*col. 6, lines 45-46, the electronic device (50), which includes buttons (41) (as shown in Fig. 4a (41)) is connected with a multifunction pointing device (10), and col. 6 line 67, col. 7, lines 1-2, the device (50) receives and processes signals; hence, one of ordinary skill in the art would have ascertained that the device (50) utilizes the same processor with respect to use of the buttons (41).*

Regarding claim 12, Denny teaches the electronic device comprises a housing, and the stylus holder is an elongated opening in the housing of the electronic device (*col. 6, lines 45-*

Art Unit: 2629

46, col. 7, Fig. 4a (10, 50), the electronic device (50) is connected with a pointing device (10), col. 6, lines 48-51, a holster (10) includes an aperture (7) through which pointing implement 1 can be inserted and removed from the holster (10) and col. 13, lines 38-53, Fig. 4(b), a holster (H) could have various orientations with respect to an electronic device (50)).

Regarding claim 15, Denny teaches the movement detection sensors detect the movements of the stylus optically (*col. 5, lines 19-22, Fig. 9c shows and an optical sensor for sensing a translation and/or a rotation of a shaft of a holstered pointing implement, and col.15, lines, 34-55, the first and the second sensors (S1, S2) can be implemented using a laser-based scrolling device 151,).*

Regarding claim 16, Denny teaches the movement detection sensors detect the movements of the stylus mechanically (*col. 15, lines 59-65, Fig. 9e (133, 135), track balls (133, 135) can be urged into contact with the shaft 5 so that the translation and/or rotation (U/D, R) of the shaft 5 can be mechanically communicated to the track balls (133, 135)).*

9. Claim 13-14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denny, III (USPN 7102626) in view of Nicolas et al. (USPN 7046237) and further in view of Lee et al. (USPN 6392639).

Regarding claim 13, while Denny as modified by Nicolas teaches the device comprises at least one sensor on the inside surface of the stylus holder (*col. 6, line 46—55, col. 8, lines 60-62, col. 8, lines 64-66, Fig. 6 (S1, S2), sensors (S1, S2) detects the movement of the pointing implement (1) inside a holster (H) via the shaft (5)),*

Denny as modified by Nicolas does not teach stylus holder comprising at least one opening through which the stylus can be accessed to detect the pressing of the stylus through the opening perpendicularly to the longitudinal axis of the stylus.

Lee et al. on the other hand teach a stylus holding channel (16) for receiving a stylus (16) and a guide opening (20) being formed in one side of a housing (12) such that a retraction of the stylus (30) from the stylus holding channel 16 can be achieved by pressing and pushing a flange (34) (col. 4, lines, col. 4, lines 32-36 and Fig. 1(20, 34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Denny's as modified by Nicolas configuration of a pointing implement (1) (shown in Fig. 4c) with Lee's guide opening (20) along with a flange (34) (as configured in Fig. 1), because the use of guide opening (20) and a flange (34) helps create an

Art Unit: 2629

arrangement where a stylus can be safely kept as an input unit in a palm size computer as taught by Lee (col. 1, lines 65-67).

Regarding claim 14, while Denny as modified by Nicolas teaches the processor is configured to associate a user interface command to the stylus and to execute the user interface command on the basis of the detection (*col. 8, lines 63-67, col. 9, lines 1-2, Fig. 6 (S1, S2, deltaL, deltaR), in response to the up & down movement of the portion 5p of the shaft 5, the first sensor (S1) generates a first signal (deltaL) and in response to the rotation R of the portion 5p of the shaft 5, the second sensor (S2) generates a second signal, (deltaR) such that an electronic device (50) processes the first and second signals (deltaL, deltaR) to initiate an action, col. 6, lines 34-36, the action initiated can be any action that can be programmed*).

Denny as modified by Nicolas does not teach the association being a user interface command to the "pressing of the stylus".

Lee et al. on the other hand teach a flange (34) of a stylus (30) as shown in Fig. 1 which can be manually pressed (col. 4, line 21 and col. 4, lines 35-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Denny's as modified by Nicolas movable pointing implement (1) (shown in Fig. 6) with Lee's flange (34) (as configured in Fig. 1), because the use of the flange (34) helps facilitate an insertion or a retraction of the stylus (30) into or from the stylus holding channel (16) as taught by Lee et al (col. 4, lines 23-25).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 7, 138, 977 to kinerk et al. teach a stylus (102) inserted into a spring-loaded socket with a variable strength sensor (108) detecting the force applied by the user and converting the mechanical movement to an electrical signal which would be applied to a processor (110) for use to an application in an electrical device (see the abstract).

U.S. Pat. No. 6, 233,464 to Chmaytelli teaches the movement of a stylus inside stylus holder (106) enabling to turn the power of PDA on and off (see the abstract).

U.S. Pat. No. 5,019,677 to Menen teaches a movement of stylus (34) with respect slidable circuit, which translates mechanical action into electrical signal (Fig. 1(34)).

Art Unit: 2629

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abbas I. Abdulsalam whose telephone number is 571-272-7685. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abbas Abdulsalam

Examiner

Art Unit 2629

January 18, 2006

A handwritten signature in black ink, appearing to read 'Abbas Abdulsalam', is written over the typed name and date.